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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/684,985	10/10/2000	Johan Nilsson	027557-064	2763

7590 02/05/2004

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EXAMINER

TRAN, PABLO N

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 02/05/2004 //

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/684,985

Applicant(s)

NILSSON, JOHAN

Examiner

Pablo N Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 7, 13 and 15-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-12 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1 and 11 have been considered but are moot in view of the new ground(s) of rejection.
2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6, 8-12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Chheda et al.* (5,963,870) in view of *Suzuki* (6,208,861).

As per claims 1 and 9-11, *Chheda et al.* disclosed a radio transceiver comprising a receiver, a quality estimator using an estimator algorithm to estimate the measured quality of the received signals, a speed estimator for measuring the relative velocity of the transceiver, and wherein the measured relative velocity is used as an input to the quality estimator (fig. 1, abstract, col. 3/ln. 46-col. 4/ln. 17, col. 4/ln. 33-47, col. 52-67).

Chheda et al. do not specifically disclose the estimation algorithm has a response speed and the response speed of the estimation algorithm is controlled in response to the measure of the relative velocity of the transceiver. However, such method of the response speed of the estimation algorithm is controlled in response to the relative velocity of the transceiver is well known in the art, as taught by *Suzuki* (see abstract). Therefore, it would have been obvious to one of ordinary skill in the art to provide such teaching, as taught by *Suzuki*, to the communication system of *Chheda et al.* in order to optimize channel monitoring but also provide reliability in switching channels.

As per claims 2 and 12, the modified system of *Chheda et al.* further disclosed the measured quality is the signal-to-interference ratio (col. 46-51, col. 4/ln. 33-39, col. 5/ln. 8-23).

As per claim 3, the modified system of *Chheda et al.* further disclosed a comparison circuit for comparing the SIR ratio with a threshold value and a control circuit for transmitting a power control signal to a further transceiver based on the comparison result (col. 46-51, col. 4/ln. 33-39, col. 5/ln. 8-23).

As per claim 4, the modified system of *Chheda et al.* further disclosed the SIR ratio threshold is set to achieve a target value of a second measure quality (col. 46-51, col. 4/ln. 33-39, col. 5/ln. 8-23).

As per claim 5, the modified system of *Chheda et al.* further disclosed the second measure quality is bit error rate (col. 46-51, col. 4/ln. 33-39, col. 5/ln. 8-23).

As per claim 6, the modified system of *Chheda et al.* further disclosed the second measure quality is frame error rate (col. 46-51, col. 4/ln. 33-39, col. 5/ln. 8-23).

As per claims 8 and 14, the modified system of *Chheda et al.* further disclosed a first higher response speed is used for a low measure speed of the transceiver and a second lower speed is used for a high measured velocity of the transceiver (see *Chheda et al.*, fig. 1, abstract, col. 3/ln. 46-col. 4/ln. 17, col. 4/ln. 33-47, col. 52-67, see *Suzuki*, abstract).

5. Claims 1-6, 8-12, and 14 are rejected under 35 U.S.C. 102(a) as being anticipated by *Endo et al.* (EP0847146) in view of *Suzuki* (6,208,861).

As per claims 1 and 9-11, *Endo et al.* disclosed a radio transceiver comprising a receiver, a quality estimator using an estimator algorithm to estimate the measured quality of the received signals, a speed estimator for measuring the relative velocity of

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the transceiver, and wherein the measured relative velocity is used as an input to the quality estimator (fig. 1, 4, 9, col. 13/ln. 45-col. 14/ln. 53, col. 21/ln. 19-col. 22-33).

Endo et al. do not specifically disclose the estimation algorithm has a response speed and the response speed of the estimation algorithm is controlled in response to the measure of the relative velocity of the transceiver. However, such method of the response speed of the estimation algorithm is controlled in response to the relative velocity of the transceiver is well known in the art, as taught by *Suzuki* (see abstract). Therefore, it would have been obvious to one of ordinary skill in the art to provide such teaching, as taught by *Suzuki*, to the communication system of *Endo et al.* in order to optimize channel monitoring but also provide reliability in switching channels.

As per claims 2 and 12, the modified system of *Endo et al.* further disclosed the measured quality is the signal-to-interference ratio (col. 13/ln. 45-col. 14/ln. 53, col. 21/ln. 19-col. 22/ln. 33).

As per claim 3, the modified system of *Endo et al.* further disclosed a comparison circuit for comparing the SIR ratio with a threshold value and a control circuit for transmitting a power control signal to a further transceiver based on the comparison result (col. 13/ln. 45-col. 14/ln. 53, col. 21/ln. 19-col. 22/ln. 33).

As per claim 4, the modified system of *Endo et al.* further disclosed the SIR ratio threshold is set to achieve a target value of a second measure quality (col. 13/ln. 45-col. 14/ln. 53, col. 21/ln. 19-col. 22/ln. 33).

As per claim 5, the modified system of *Endo et al.* further disclosed the second measure quality is bit error rate (col. 13/ln. 45-col. 14/ln. 53, col. 21/ln. 19-col. 22/ln. 33).

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As per claim 6, the modified system of *Endo et al.* further disclosed the second measure quality is frame error rate (col. 13/ln. 45-col. 14/ln. 53, col. 21/ln. 19-col. 22/ln. 33).

As per claims 8 and 14, *Endo et al.* disclosed a first higher response speed is used for a low measure speed of the transceiver and a second lower speed is used for a high measured velocity of the transceiver (see *Endo et al.*, col. 13/ln. 45-col. 14/ln. 53, col. 21/ln. 19-col. 22/ln. 33, see *Suzuki*, abstract).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kansakoski et al. (6,377,813), Rudrapatna et al. (6,052,598), and Wan (6,385,460) disclose radiotelephone communications systems.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pablo Tran whose telephone number is (703)308-7941. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (703)305-4385.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

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(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

PABLO N. TRAN
PRIMARY EXAMINER

February 3, 2004


HV2685